

README:

I am using python2.7

When we extract the folder in a given location then there will be one folder called code will we formed in that code folder there will be aonther folder called search where all the codes will be present.

While running these commands we have to make sure that the pwd is in search folder.

And we must have tkinter on our system.

Q1:

First we have to test that the SearchAgent is working correctly by running:

```
python2 pacman.py -l tinyMaze -p SearchAgent -a fn=tinyMazeSearch
```

We can test the algorithm by runnign these commands ... for these commands it will quickly find the soln if algo is correct

```
python2 pacman.py -l tinyMaze -p SearchAgent
```

```
python2 pacman.py -l mediumMaze -p SearchAgent
```

```
python2 pacman.py -l bigMaze -z .5 -p SearchAgent
```

Q2:

Test your code the same way you did for depth-first search.

```
python2 pacman.py -l mediumMaze -p SearchAgent -a fn=bfs
```

```
python2 pacman.py -l bigMaze -p SearchAgent -a fn=bfs -z .5
```

Q3:

```
python2 pacman.py -l mediumMaze -p SearchAgent -a fn=ucs
```

```
python2 pacman.py -l mediumDottedMaze -p StayEastSearchAgent
```

```
python2 pacman.py -l mediumScaryMaze -p StayWestSearchAgent
```

Q4:

we can test your A* implementation on the original problem of finding a path through a maze to a fixed position using the Manhattan distance heuristic (implemented already as `manhattanHeuristic` in `searchAgents.py`).

```
python2 pacman.py -l bigMaze -z .5 -p SearchAgent -a fn=astar,heuristic=manhattanHeuristic
```

Q5:

```
python2 pacman.py -l tinyCorners -p SearchAgent -a fn=bfs,prob=CornersProblem
```

```
python2 pacman.py -l mediumCorners -p SearchAgent -a fn=bfs,prob=CornersProblem
```

Q6:

Implement a non-trivial, consistent heuristic for the `CornersProblem` in `cornersHeuristic`.

```
python2 pacman.py -l mediumCorners -p AStarCornersAgent -z 0.5
```

Q7:

```
python2 pacman.py -l testSearch -p AStarFoodSearchAgent
```